FIG. 1A

5'	GAG	ACT 	11 CAC	GGT	CAA	20 GCT 2	AAG (GCG	AAG	AGT	GGG	TGG	CTG .	AAG (CCA '	TAC S	TAT :	56 ГТТ
	ATA	GAA	65 TTA	ATG	GAA	74 AGC 2		AAA 	83 GAC	ATC	ACA	92 AAC 		GAA	101 GAA 			110 AAA
				M	Ε	s	R	K	D	I	T	N	Q	Е	E	L	M	K
	ATG	AAG	119 CCT	AGG	AGA	128 AAT	TTA	GAA	137 GAA	GAC	GAT		TTG	CAT	155 AAG	GAC		164 GGA
	- М	K	P	R	R	N	L	E		D	D	Y	L.	$\langle \mathbf{H} \rangle$	K	D	T	G
	GAG	ACC	173 AGC	ATG	CTA	182 AAA	AGA		191 GTG	CTT	TTG	200 CAT	TTG	,	209 CAA	ACA	GCC	218 CAT
	E	Т	s	M	L	K	R	P	V	L	L	H	L	H	Q	T	A	Н
	GCT	GAT	227 GAA	TTT	GAC	236 TGC	CCT	TCA	245 GAA	CTT	CAG	254 CAC	ACA	CAG	263 GAA	CTC	TTT 	272 CCA
	A	D	E	F	D	C	P	s	E		Q	Н	T	Q	E	L	F	P
	CAG	TGG	281 CAC	TTG	CCA	290 ATT	AAA	ATA	299 GCT	GCT	ATT	308 ATA		TCT	317 CTG	ACT	TTT	326 CTT
γ	0					I							_A	S	_L_	T	F	L
^1		ACI	335 CTT	CTG	AGG	344 GAA	GTA	ATT	353 CAC		TTA			TCC	371 CAT		CAA	380 TAT
	Y	T	L	L	R	E	V	I	H	P	L	A	T	S	Н	Q	Q	Y
	TTT	TAT	389 AAA	ATT		398 ATC	CTG			AAC			TTG			GTT		
	F	Y	K	I	P	I	L	V	/\ <u>T</u>	N	K	v	L	P	M		S	I
	AC:	r CT	443 C TTC	G GCZ	A TTC	452	TAC		461 CCA	GG:	r GT	470 G ATA	A GCA	GCA	479 ATT		CAA	488 CTT
	T	L	L	A	L	v	Y	L	P	G	v	I_	<u>A</u>	A	I	V	Q	L
	CA'	r aa'	49' T GG	7 A AC	C AAG	506 TAT	AAC	AA E	519 3 TT	5 I CC.	A CA	524 T TG	1 3 TTC	GAT	533 AAC		ATG	542 TTA
	H	n	G	Т	K	Y	К	К	F	P	Н	W	L	D	K	W	M	L
	AC	A AG	55 A AA	G CA	G TT	560 T GG0	CT	r cr	C AG	т тт	C TT	TT TT	r GC	r GTA	58°	G CA	r GCZ	596 A ATT
	 T			Q	F	G	I,	L	s	F	F	F				Н		
				1.										1	・ラー			
	TA 		60 T CT	G TC	T TA	614 C CC	TA A		62 G CG 	A TO	C TA		A TA			G CT		650 TGG
	¥	<u> </u>	<u> </u>	<u>. S</u>	: У	P	, 8 rl		, R Ş⊊		3 3	Z R	. У	K	L	L	N	M

677 686 695 704 668 GCA TAT CAA CAG GTC CAA CAA AAT AAA GAA GAT GCC TGG ATT GAG CAT GAT GTT --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- $\hbox{A} \quad \hbox{Y} \quad \hbox{Q} \quad \hbox{Q} \quad \hbox{V}. \quad \hbox{Q} \quad \hbox{Q} \quad \hbox{N} \quad \hbox{K} \quad \hbox{E} \quad \hbox{D} \quad \hbox{A} \quad \hbox{W} \quad \hbox{I} \quad \hbox{E} \quad \hbox{H} \quad \hbox{D} \quad \hbox{V}$ 713 722 731 740 TGG AGA ATG GAG ATT TAT GTG TCT CTG GGA ATT GTG GGA TTG GCA ATA CTG GCT $W \quad R \quad M \quad E \quad I \quad \stackrel{\mathbf{Y}}{\sim} \quad \mathbf{V} \quad \mathbf{S} \quad \mathbf{L} \quad \mathbf{G} \quad \mathbf{I} \quad \mathbf{V} \quad \mathbf{G} \quad \mathbf{L} \quad \mathbf{A} \quad \mathbf{I} \quad \mathbf{L} \quad \mathbf{A}$ 776 794 785 CTG TTG GCT GTG ACA TCT ATT CCA TCT GTG AGT GAC TCT TTG ACA TGG AGA GAA L L A V T S I P S V S D S L T W R E 857 830 839 848 821 TTT CAC TAT ATT CAG AGC AAG CTA GGA ATT GTT TCC CTT CTA CTG GGC ACA ATA F H Y I O S K L G I V S L L L G T I $\gamma > \gamma$ 902 893 875 884 CAC GCA TTG ATT TTT GCC TGG AAT AAG TGG ATA GAT ATA AAA CAA TTT GTA TGG <u>H A L I F A W N K W</u> I D I K Q F V W

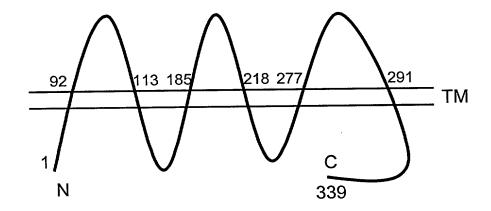
929 938 947 956 965 974 TAT ACA CCT CCA ACT TTT ATG ATA GCT GTT TTC CTT CCA ATT GTT GTC CTG ATA Y T P P T F M I A V F L P I V V L I 983 992 1001 1010 1019 1028 TTT AAA AGC ATA CTA TTC CTG CCA TGC TTG AGG AAG AAG ATA CTG AAG ATT AGA FKSILFLPCLRKKILKIR 1046 1055 1064 1073 CAT GGT TGG GAA GAC GTC ACC AAA ATT AAC AAA ACT GAG ATA TGT TCC CAG TTG ___ ___ __ __ __ __ __ __ __ __ __ ___ __ __ __ __ __ __ __ __ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ H G W E D V T K I N K T E I C S Q L 1100 1109 1118 1127 TAG AAT TAC TGT TTA CAC ACA TTT TTG TTC AAT ATT GAT ATA TTT TAT CAC CAA 1154 1163 1172 1181 1145 ___ ___ __ __ __ __ __ __ __ __ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ H F K F V F V N K M I I Q G K K K K

AAA AA 3'

--- --K

FIG. 1B

Extracellular



Intracellular

FIG. 1C

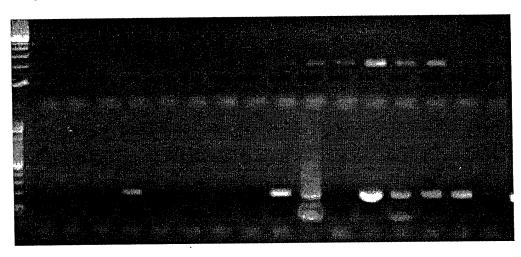
A

B

27x 1 2 3 4 5 6 7 8

25x 30x

1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8



Panels:

Α

- 1. Brain
- 2. Prostate
- 3. LAPC-4 AD
- 4. LAPC-4 Al
- 5. LAPC-9 AD
- 6. HeLa
- 7. Murine cDNA
- 8. Neg. control

B

- 1. Brain
- 2. Heart
- 3. Kidney
- 4. Liver
- 5. Lung
- 6. Pancreas
- 7. Placenta
- 8. Skeletal Muscle

C

- 1. Colon
- 2. Ovary
- 3. Leukocytes
- 4. Prostate
- 5. Small Intestine
- 6. Spleen
- 7. Testis
- 8. Thymus

FIG. 3A

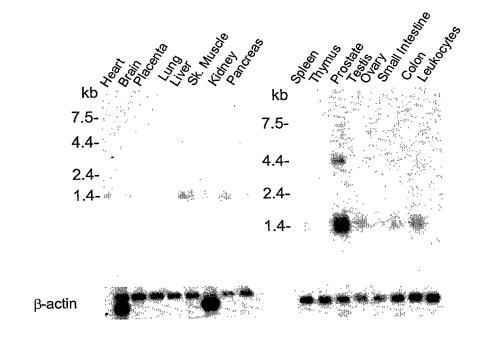
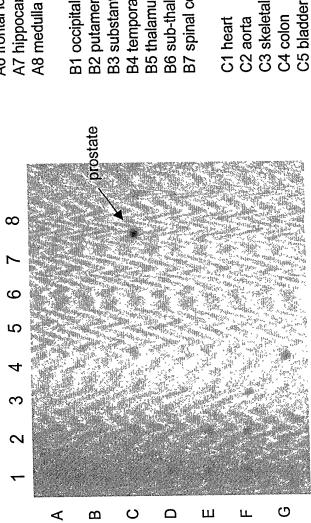


FIG. 3B

41 brain



D8 mammary gland D4 pituitary gland D5 adrenal gland D7 salivary gland D6 thyroid gland D3 pancreas D2 ovary D1 testis A8 medulla oblongata A3 caudate nucleus A5 cerebral cortex A7 hippocampus A6 frontal lobe A4 cerebellum A2 amygdala

E3 small intestine
E4 spleen
E5 thymus
E6 peripheral leukocytes
E7 lymph node
E8 bone marrow E1 kidney E2 liver B6 sub-thalamic nucleus B7 spinal cord B3 substantia nigra B4 temporal lobe B1 occipital lobe B5 thalamus B2 putamen

C3 skeletal muscle C1 heart C2 aorta C4 colon

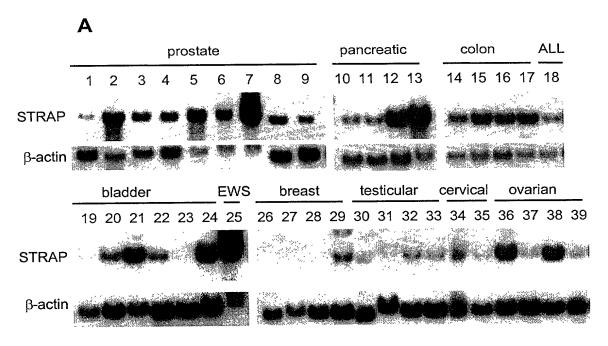
C7 prostate C8 stomach

C6 uterus

G5 fetal spleen G6 fetal thymus G7 fetal lung G1 fetal brain G2 fetal heart G3 fetal kidney **G4** fetal liver **F2 lung F3 trachea** F4 placenta F1 appendix

AGAAATTTAGAAGAAGACGATTATTTGCATAAGGACACGGGAGAGACCAGCATGCTAAAAAAGACCTGTGCTTTTGC $\tt GTGGCACTTGCCAATTAAAATAGCTGCTATTATAGCATCTCTGACTTTTCTTTACACTCTTCTGAGGGAAGTAATT$ CACCCCTTAGCAACTTCCCATCAACAATATTTTTATAAAATTCCAATCCTGGTCATCAACAAAGTCTTGCCAATGG TTTCCATCACTCTCTTGGCATTGGTTTACCTGCCAGGTGTGATAGCAGCAATTGTCCAACTTCATAATGGAACCAA GTATAAGAAGTTTCCACATTGGTTGGATAAGTGGATGTTAACAAGAAAGCAGTTTGGGCTTCTCAGTTTCTTTTTT GCTGTACTGCATGCAATTTATAGTCTGTCTTACCCAATGAGGCGATCCTACAGATACAAGTTGCTAAACTGGGCAT ATCAACAGGTCCAACAAAATAAAGAAGATGCCTGGATTGAGCATGATGTTTGGAGAATGGAGATTTATGTGTCTCT $oldsymbol{\mathsf{AGAGAATTCACTATATTC}}{\mathsf{AGGTAAAT}}$ AATATATAAAATAACCCTAAGAGGTAAATCTTCTTTTTGTGTTTATGAT ATAGAATATGTTGACTTTACCCCATAAAAAATAACAAATGTTTTTCAACAGCAAAGATCTTATACTTGTTCCAATT GAGACAGGGTTTTCCCATGTTGGCCAGGCTGGTCTCGATCTCCTGACCTCAAATGATCCGCCCACCTCGGCCTCCC AAAGTGCTGGGATGACAGTTGTGAGCCACCACACTCAGCCTGCTCTTTCTAATATTTGAAACTTGTTAGACAATTT TGTCACCTGAATTTAGTAATGCCTTTTATGTTACACAACTTAGCACTTTCCAGAAACAAAAACTCTCTCCTTGAAA ACTTACTCACTTGAAGTTTCTAAATATTCTTGTAATTTTAAAACTATCTCAGATTTACTGAGGTTTATCTTCTGGT GGTAGATTATCCATAAGAAGAGTGATGTGCCAGAATCACTCTGGGATCCTTGTCTGACAAGATTCAAAGGACTAAA ${\tt TTTAATTCAGTCATGAACACTGCCAATTACCGTTTATGGGTAGACATCTTTGGAAAATTTCCACAAGGTCAGACATT}$ CGCAACTATCCCTTCTACATGTCCACACGTATACTCCAACACTTTATTAGGCATCTGATTAGTTTGGAAAGTATGC $\tt CCTGATAACCACTGGAGTTCTTTGGTCCTCATTAAATAGCTTTCTTCACACATTGCTCTGCCTGTTACACATATGA$ TGAACACTGCTTTTTAGACTTCATTAGGAATTTAGGACTGCATCTTGACAACTGAGCCTATTCTACTATATGTACA ATACCTAGCCCATAATAGGTATACAATACACATTTGGTAAAACTAATTTTCAACCAATGACATGTATTTTCAACT AGTAACCTAGAAATGTTTCACTTAAAATCTGAGAACTGGTTACACTACAAGTTACCTTGGAGATTCATATATGAAA ${\tt GGCAGGCTAATGACCATTTCCAGTAAAGTGAATAGAGGTCAGAAGTCGTATAAAAGAGGTGTTGTCAGAACACCGT}$ TGAGATTACATAGGTGAACAACTATTTTTAAGCAACTTTATTTGTGTAGTGACAAAGCATCCCAATGCAGGCTGAA ATGTTTCATCACATCTCTGGATCTCTATTTTTGTGCAGACATTGAAAAAATTGTTCATATTATTTCCATGTTATC ${\tt CATTAGTCGCCTTCACAACTGATAAAGATCACTGAAGTCAAATTGATTTTTGCTATAATCTTCAATCTACCTATAT}$ TTCACTTAGACAGCTTGGAGACAAGAAATTACCCAAAAGTAAGGTGAGGAGGATAGGCAAAAAGAGCAGAAAAGATG TGAATGGACATTGTTGAGAAATGTGATAGGAAAACAATCATAGATAAAGGATTTCCAAGCAACAGAGCATATCCAG ${\tt ATGAGGTAGGATGGGATAAACTCTTATTGAACCAATCTTCACCAATTTTGTTTT}{\underline{{\tt TCTTTTGCAGA}}{\tt GCAAGCTAGGA}}$ CCTGCCATGCTTGAGGAAGAAGATACTGAAGATTAGACATGGTTGGGAAGACGTCACCAAAATTAACAAAACTGAG ATATGTTCCCAGTTGTAGAATTACTGTTTACACACATTTTTGTTCAATATTGATATATTTTATCACCAACATTTCA

FIG. 5



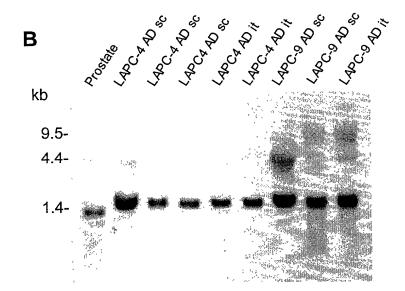


FIG. 6

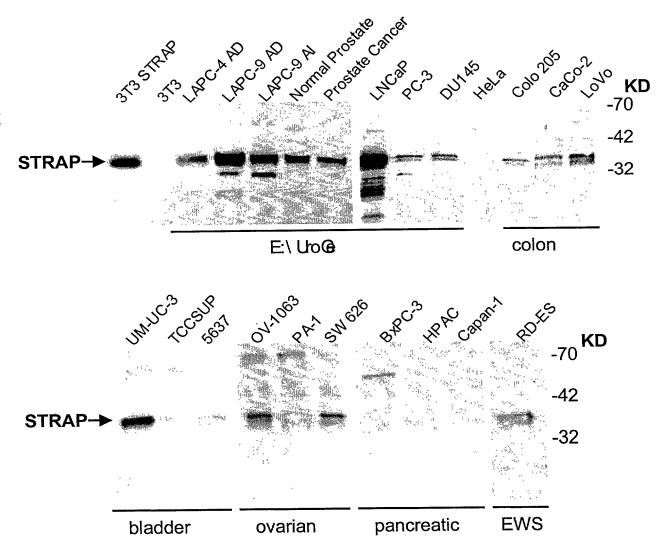
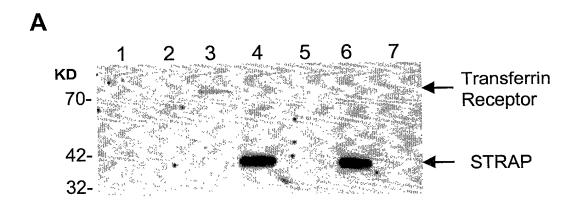


FIG. 7



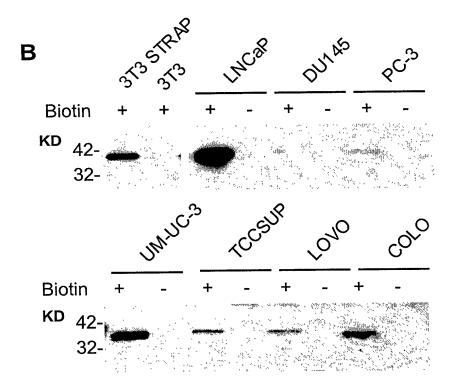
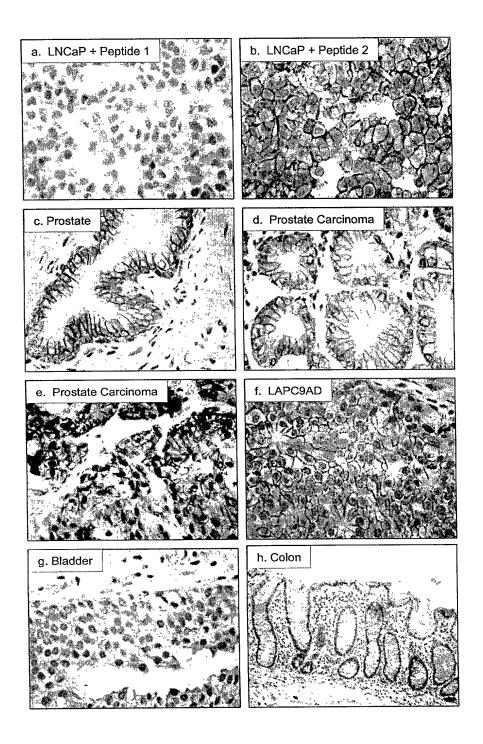


FIG. 8



5 '	GAC																GTT	55 GCC
										 Val							Val	Ala
																	TAT	
																	Tyr	
	CTT	TAT	118 TAC	GGC	ACC	127 AAG	TAT	AGG	136 AGA	TTT	CCA	145 CCT	TGG	TTG	154 GAA	ACC	TGG	163 TTA
	 Leu	Tyr	Tyr							Phe							Trp	Leu
	CAG	тст	172 AGA	AAA	CAG	181 CTT	GGA	TTA	190 CTA	AGT	TTT	199 TTC	TTC	GCT	208 ATG	GTC	CAT	217 GTT
																	 His	
			226			235			244			253			262			271
					TGC							GAG					CTC	
	Ala	Tyr		Leu	Cys		Pro	Met		Arg	Ser		Arg	Tyr		Phe	Leu	
	ATG									ATT				TGG	316 AAT	GAG	GAA	325 GAA
	Met													Trp	Asn	Glu	Glu	Glu
	GTT									TTT							TTA	379 CTT
	Val									Phe							Leu	Leu
							TCT			TCA				GCT		AAC	TGG	433 AGA
					Val						Val		Asn	Ala	Leu		Trp	Arg
	<i>ር</i> አ አ	ጥጥረግ	442	ம்புர	አ ጥጥ	451		አሮአ	460		ייים	469 GTC		CTG	478		ልርጥ	487 ACT
																		Thr
	TTC	CAT	496 GTT		ATT	505 TAT		TGG	514 AAA	CGA	GCT	3'						
	Phe	His	Val	Leu	Ile	Tyr	Gly	Trp	Lys	Arg	Ala							

STRAP-2, AA508880 (NCI_CGAP Pr6)

STRAP-2, 98P4B6 SSH fragment

AI139607 (testis EST)

R80991 (placental EST)

ggccgcggcanccgctacgacctggtcaacctggcagtcaagcaggtcttggccanacaagagccacctctgggtg aaggaggaggtctggcggatggagatctacctctccctgggagtgctggccctcggcacgttgtccctgctggccg tgacctcactgccgtccattgcaaactcgctcaactggaggagttcagcttcgttcagtcctcactgggctttgt ggccntcgtgtgagcacactncacacgctcacctacggctggacccgcgccttcgaggagagccgctacaagttc tacctncctccaccttcacgntcacgctggtgccctgcgttcgttcatcctgggccaaagccgctttntac tqccttqcattcagccgnaga

FIG. 11A

STRAP-1		FYKIPILV																		
STRAP-2	2	FYKIPIEI	VNK	TLP	[V#	ITLI	LSL	VYL	AGL	LAAA	YQLY.					STW.	ĽQC	RK	QLC	;
		*****	**	**	*	***	* *	***	*	**	**	*	***	**	**	*		**	* *	;
STRAP-1	166	LLSFFFAV	LHA	IYSI	LSI	ZPMRI	RSY	RYK	LLN	WAYÇ	QVQQ	NK	EDAV	VIEH	DVWI	RME	IYV	SL	GIV	,
STRAP-2		LLSFFFAM																		
DIRAL 2	02	*****																		
STRAP-1	226	GLAILALL	AVT	SIP	svs	SDSL'	TWF	REFH	YIÇ	SKLO	ivsi	LLL	GTII	HALI	FAW	NΚ				
STRAP-2	122	SLGLLSLI	AVT	SIP	SVS	SNAL	NWF	REFS	FIÇ	STLO	IAVY:	LLI	STFI	IVLI	YGW:	KR				
		and the same							44	. 4. 4.4			* :	* **	*					

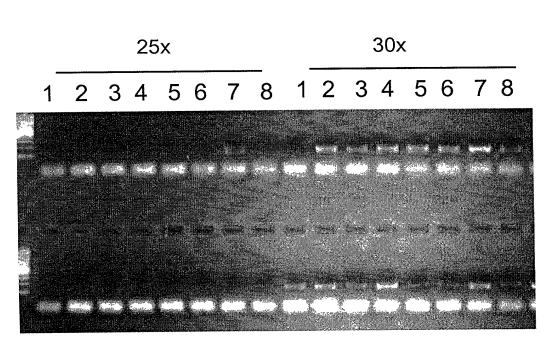
-1G. 11B

000	180 76 0	270 166 68 82	
1 15 16 30 31 45 46 60 61 75 76 90 STRAP-1 MESRKDITNQEELWK MKPRRNLEEDDYLHK DTGETSMLKRPVLLH LHQTAHADEFDCPSE LQHTQELFPQWHLPI KLAAIIASLTFLYTL STRAP-2	STRAP-1 LREVIHPLATSHQQY FYKIPILVINKVLPM VSITLLALVYLPGVI AAJVVOLHNGTKYKKR PHWLDKWMLTRKGRG LLSFFFRAVLHALTSH STRAP-2	STRAP-1 SYPWRKSYRYKLINW AYQOVQONKEDAWIE HDVWRMEIYVSLGIV GLAILALLAVISIPS VSDSLTWREFHYIQS KUGIVSILIGATIHAL STRAP-2 CLPWRKSBERYLFINM AYQOVHANIENSWNE EEVWRHIEMYISFGIM SLGLISLLAVISIPS VSNALNWREFSIGS THOYVALLISTFHVI STRAP-3	STRAP-1 IFAWNKWIDIKQFVW YTPPTFMIAVFLPIV VLIMEKSILFLPCTARK KILKIRHGWEDVTKI NKTEICSQL 339 345 346 360 STRAP-2 IVGWKRA
ST ST ST	STS	ST ST ST ST	ST ST ST

A

B

FIG. 12



Α

- 1. Brain
- 2. Heart
- 3. Kidney
- 4. Liver
- 5. Lung
- 6. Pancreas
- 7. Placenta
- 8. Skeletal Muscle

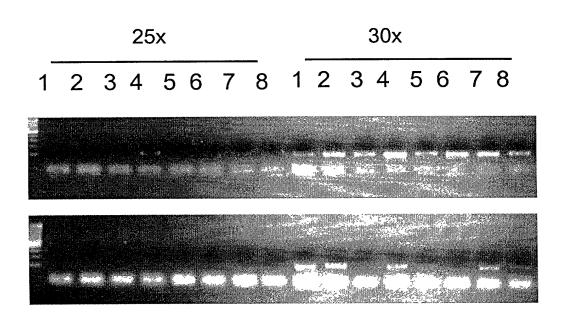
B

- 1. Colon
- 2. Ovary
- 3. Leukocytes
- 4. Prostate
- 5. Small Intestine
- 6. Spleen
- 7. Testis
- 8. Thymus

Α

В

FIG. 13



Α

- 1. Brain
- 2. Heart
- 3. Kidney
- 4. Liver
- 5. Lung
- 6. Pancreas
- 7. Placenta
- 8. Skeletal Muscle

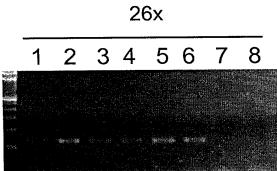
В

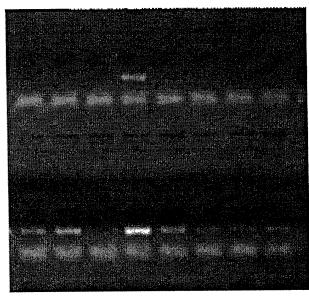
- 1. Colon
- 2. Ovary
- 3. Leukocytes
- 4. Prostate
- 5. Small Intestine
- 6. Spleen
- 7. Testis
- 8. Thymus

B

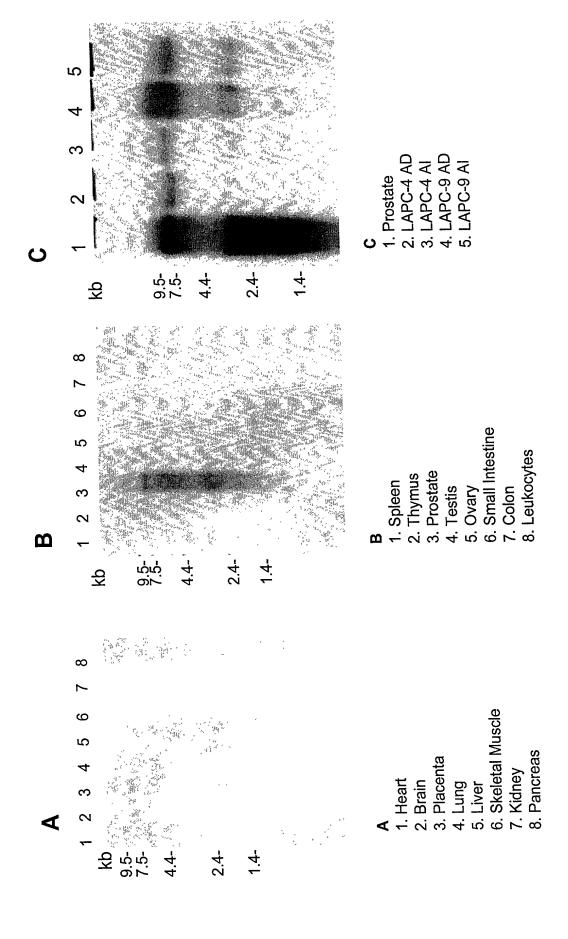
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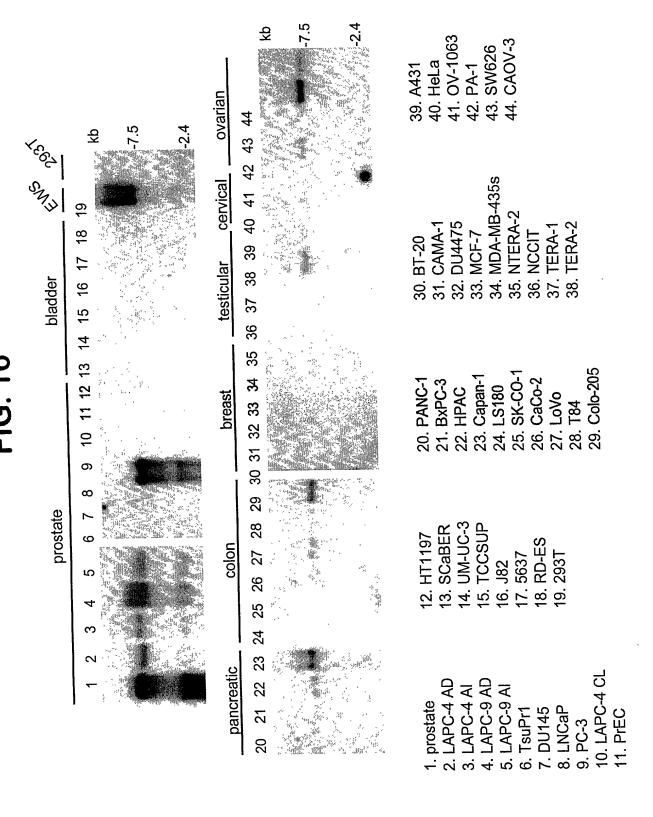
30x





В Α 1. Brain 1. Colon 2. Ovary 2. Prostate 3. Leukocytes 3. LAPC-4 AD 4. Prostate 4. LAPC-4 AI 5. Small Intestine 5. LAPC-9 AD 6. Spleen 6. HeLa 7. Murine cDNA 7. Testis 8. Thymus 8. Neg. control





GDB Compreher

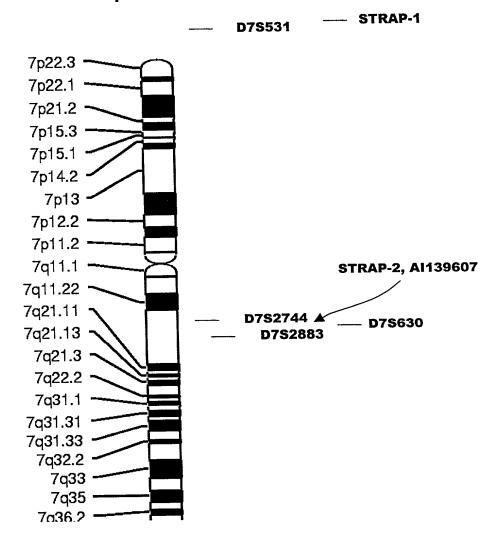


FIG. 18



FIG. 19

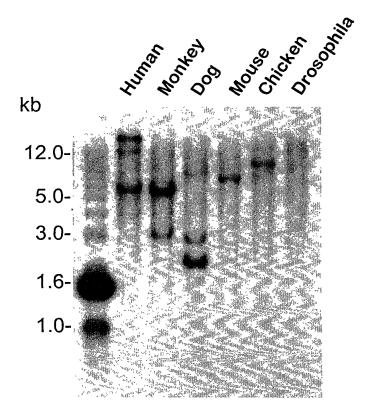
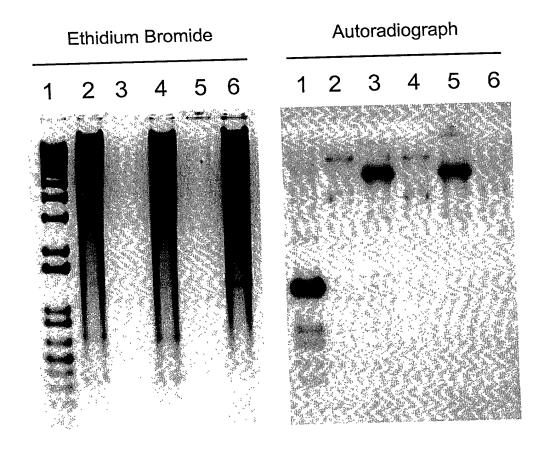


FIG. 20



Lanes

- 1) 1kb ladder
- 2) human female genomic
- 3) 12P11 BAC mus
- 4) human female genomic
- 5) 12P11 BAC mus
- 6) 3T3